



Original Article

Covid-19-associated fungal osteomyelitis of jaws and sinuses: An experience-driven management protocol

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Abstract

Invasive fungal co-infections with COVID-19 are currently being reported at an alarming rate. Our study explores the importance of early identification of the disease, probable etiopathogenesis, clinical and radiological features and a treatment protocol for COVID-19 Associated Fungal Osteomyelitis of Jaws and Sinuses (CAFOJS). A one-year prospective study from June 2020 to May 2021 was conducted among CAFOJS diagnosed patients at a tertiary care center in South India. Demographic details, COVID-19 infection and treatment history, time taken for initiation of symptoms after COVID-19 diagnosis, medical history and clinical features were recorded. All patients were managed with a standard diagnostic and intervention protocol which included pre-operative and post-operative administration of Inj. Amphotericin B 50 mg (liposomal), early aggressive surgical debridement and tab. Posaconazole GR 300 mg OD for 90 days after discharge. Thirty-nine (78%) patients were diagnosed with CAFOJS out of 50 osteomyelitis patients. 35 patients (90%) were diabetic and 21 patients (54%) were known to receive steroids during the COVID-19 treatment. Sole existence of *Mucorales spp.* was seen in 30 patients (77%), *Aspergillus fumigatus* in 2 patients (5%), *Curvularia spp.* in 2 patients (5%). Concomitant existence of *Mucorales* and *Aspergillus fumigatus* was reported in two patients (5%) and *Candida albicans* in three patients (8%). Patients underwent treatment with standard protocol and no recurrence noted. CAFOJS is a clinical entity with aggressive presentation and warrants early diagnosis and treatment.

Lay summary

Invasive fungal infections of head and neck region cause necrosis of bones affected by it, especially maxilla. Early diagnosis and treatment are advocated in such infections due to its aggressive clinical presentation compared to similar infections before COVID-19 pandemic.

Key words: Fungal osteomyelitis, COVID-19, Mucormycosis, Curvalaria, Aspergillosis, Maxillectomy.
